

In the claims:

Claims 1 - 117: (Cancelled)

118. (New) A local area network comprising:

a LAN switch;

a plurality of local area network nodes;

a power supply subsystem comprising at least one of a voltage sensor and a current sensor;

a power management and control unit; and

communication cabling connecting said plurality of nodes to said power supply subsystem and to said LAN switch, said communication cabling providing data communication between said LAN switch and said plurality of local area network nodes;

said power supply subsystem being operable under control of said power management and control unit to:

provide at least some power via the communication cabling to said plurality of local area network nodes; and

monitor via said at least one of a voltage sensor and a current sensor at least one of the power consumption of, and the current flow to, each of said plurality of local area network nodes.

119. (New) A local area network according to claim 118, further comprising a management workstation in communication with said power management and control unit.

120. (New) A local area network according to claim 119, wherein said power management and control unit is governed by an operation of said management workstation.

121. (New) A local area network according to claim 119, wherein said power management and control unit is further operable to report for each local area network node of said plurality of local area network nodes a status of at least one of said local area network node and said communication cabling, to said management workstation.

122. (New) A local area network according to claim 118, wherein as a consequence of said monitored power consumption, said power management and control unit classifies a condition of each of said plurality of local area network nodes as being in one of over-current, under-current and normal condition.

123. (New) A local area network according to claim 122, further comprising a management workstation in communication with said power management and control unit, said power management and control unit reporting said classification of each of said plurality of local area network nodes to said management workstation.

124. (New) A local area network according to claim 118, wherein said power management and control unit classifies a total of the power consumption of said

plurality of local area network nodes as being in one of over-current and normal condition.

125. (New) A local area network according to claim 124, further comprising a management workstation in communication with said power management and control unit, said power management and control unit reporting said over-current or normal classification to said management workstation.

126. (New) A local area network according to claim 118, wherein at least one of said plurality of local area network nodes is operable in a full functionality mode and a partial functionality mode, said management and control unit operating said at least one of said plurality of local area network nodes in one of said full functionality mode and said partial functionality mode.

127. (New) A local area network according to claim 126, wherein said management and control unit is operable to communicate, via said LAN switch, with said at least one of said plurality of local area network nodes, said operating being as a result of said communication.

128. (New) A local area network according to claim 118, wherein said power supply subsystem and said LAN switch are located within a single hub.

129. (New) A local area network according to claim 118, wherein said communication cabling connects said LAN switch to said plurality of nodes via said power supply subsystem.

130. (New) A power supply subsystem for supplying power to at least one local area network node over communication cabling, said power supply subsystem comprising:

at least one of a voltage sensor and a current sensor; and

a power management and control unit,

said power management and control unit being operable to:

provide at least some power via the communication cabling to the at least one local area network node; and

monitor via said one of a voltage sensor and a current sensor at least one of the power consumption of, and the current flow to, the at least one local area network node.

131. (New) A power supply subsystem according to claim 130, wherein as a consequence of said monitored power consumption, said power management and control unit classifies a condition of said at least one local area network node as being in one of over-current, under-current and normal condition.

132. (New) A power supply subsystem according to claim 131, wherein said power management and control unit is further operable to report said classification to a management workstation.

133. (New) A power supply subsystem according to claim 130, wherein said at least one local area network node comprises a plurality of local area network nodes, said power management and control unit classifying the condition of a total

of the power consumption of said plurality of said local area network nodes as being in one of over-current and normal condition.

134. (New) A power supply subsystem according to claim 133, wherein said power management and control unit is further operable to communicate said over-current or normal classification to a management workstation.

135. (New) A power supply subsystem according to claim 130, wherein said power management and control unit is governed by a management workstation.

136. (New) A power supply subsystem according to claim 130, wherein said power management and control unit is further operable to interrogate the at least one network node to determine if the at least one network node has characteristics allowing the at least one network node to receive power over the communication cabling.

137. (New) A power supply subsystem according to claim 136, wherein said power management and control unit is further operable to report a status of at least one of the at least one network node and the communication cabling to a management workstation.

138. (New) A method of supplying power to at least one network node over communication cabling, the method comprising;

interrogating at least one network node to determine whether characteristics of the at least one network node allow it to receive power over the communication cabling;

providing power to said at least one network node over said communication cabling;

monitoring at least one of power consumption of, and current flow to, said at least one network node.

139. (New) A method according to claim 138, further comprising

reporting said monitored at least one of power consumption and current flow to a management workstation.